

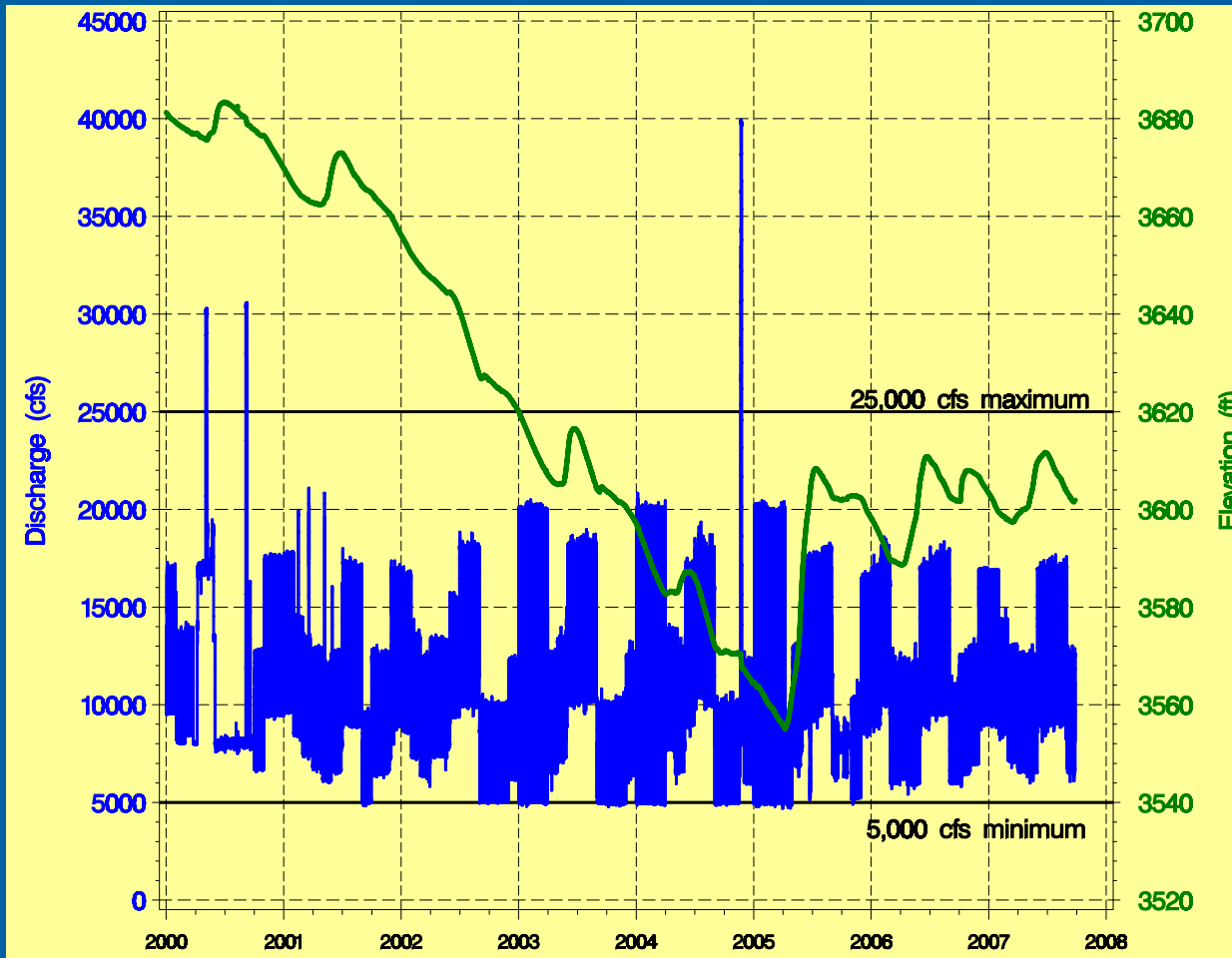


Lake Powell and GCD Release Water-Quality Update

TWG Meeting Oct 2-3, 2007

Bill Vernieu, GCMRC

Lake Powell Surface Elevation 2000-2007



Minimum reservoir elevation

- 2007 – 3597 ft
- 2006 – 3589 ft

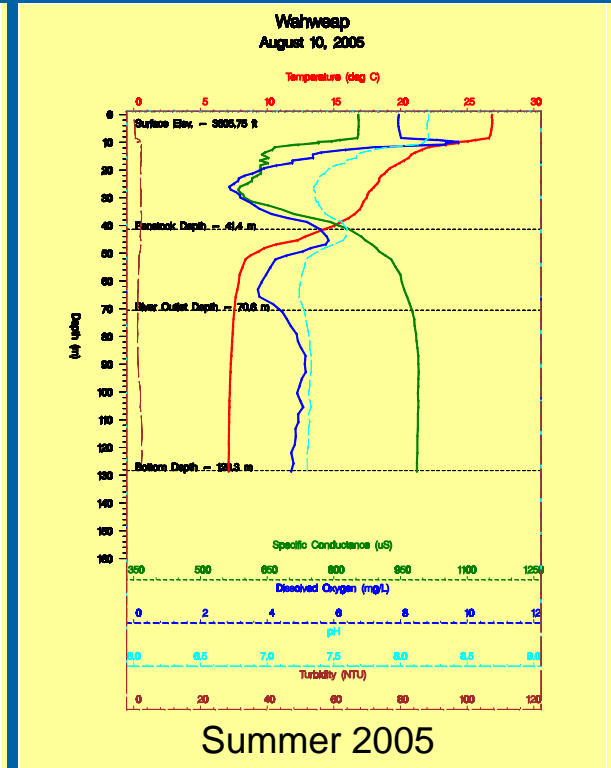
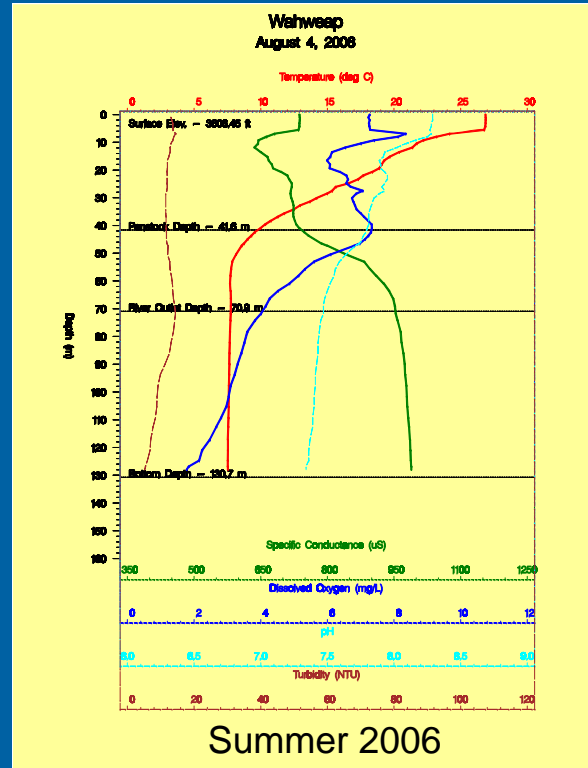
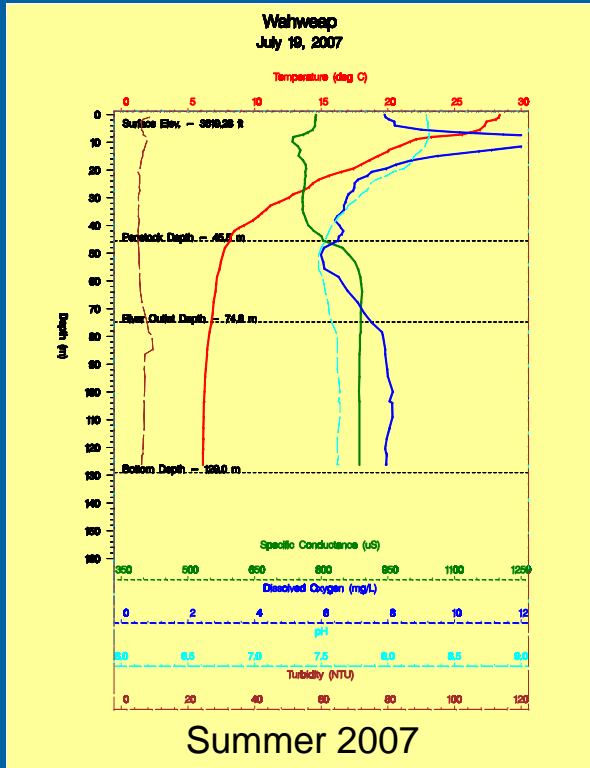
Apr-Jul Unreg Inflow

- 2007 Inflow
4.053 Maf
(51%)
- 2006 Inflow
5.320 Maf
(67%)



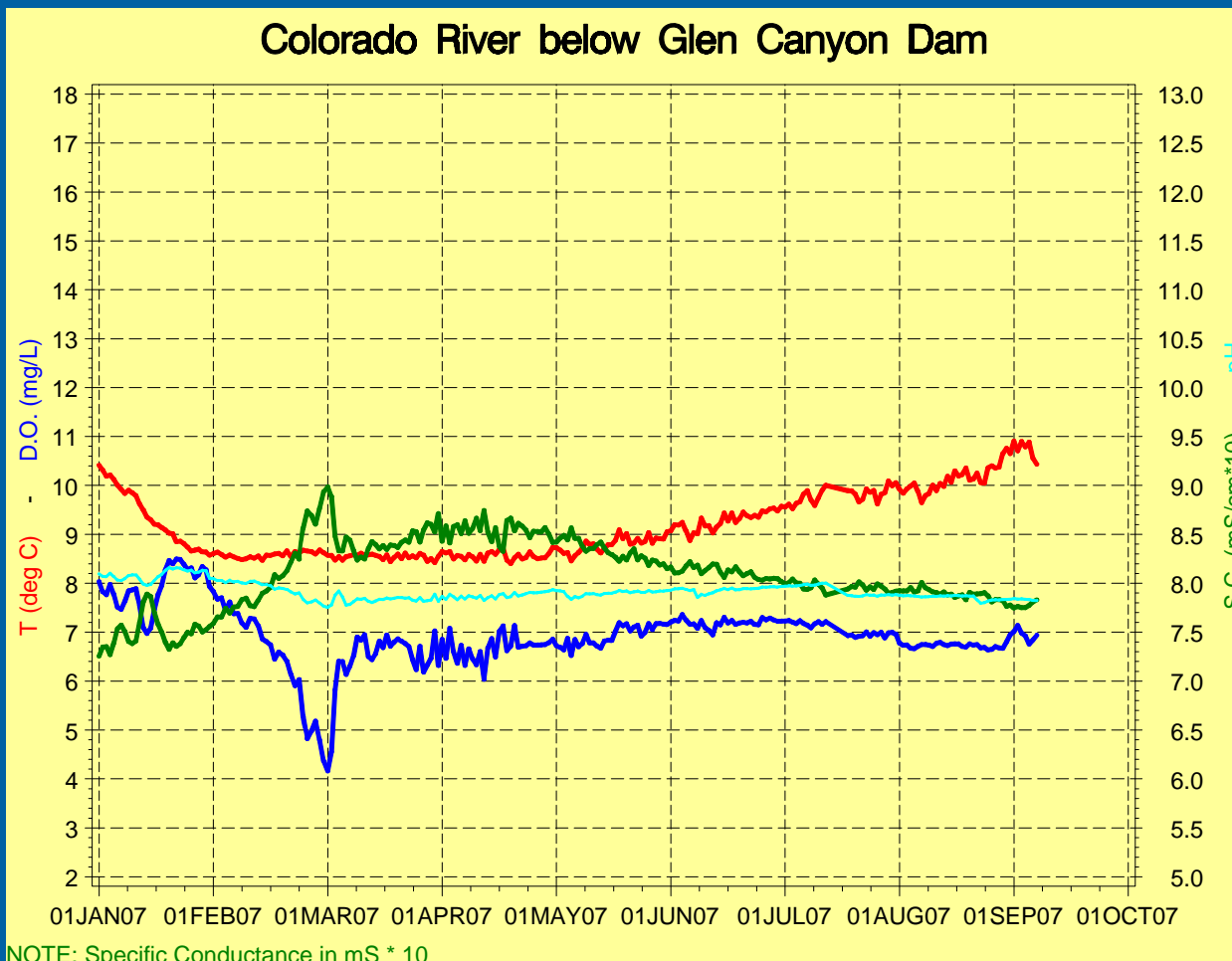
↑ Reservoir Elevation + ↓ Inflows = ↓ Release Temperatures

Lake Powell Conditions 6/9/07



- Hypolimnetic DO concentrations (blue line) have increased because of freshening from winter underflow in early 2007
- Large subsurface DO peak shows increased productivity in 2007
- Low Dissolved Oxygen concentrations in 2008 unlikely

Glen Canyon Dam Release Water Quality - 2007



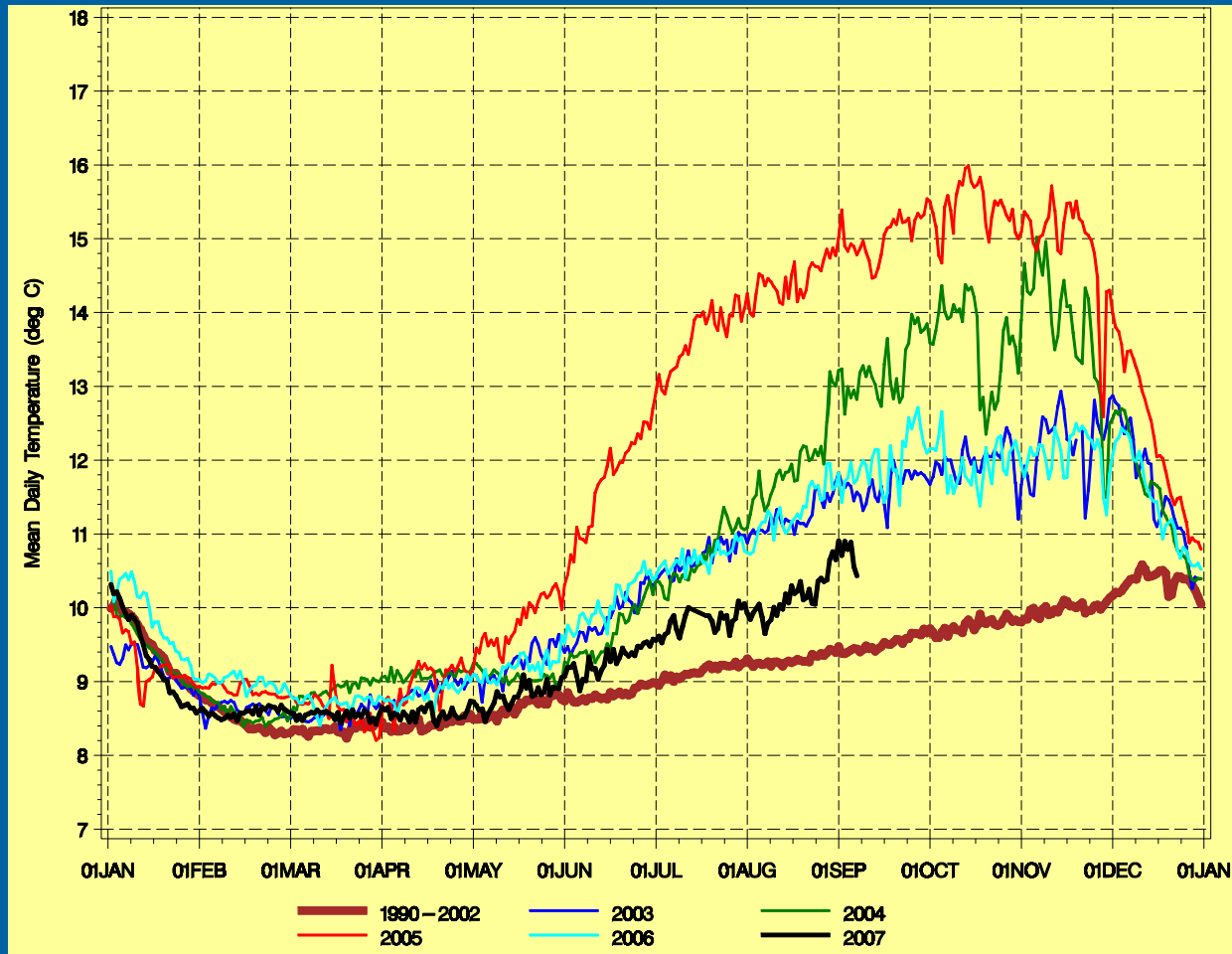
Temperature (red)

- Increased above normal values June 1
- Probable peak of 11-12° C in late November

Dissolved Oxygen (blue)

- Concentrations have remained steady at ~7mg/L since March
- February DO reduction because of hypolimnetic upwelling from winter underflow current

Glen Canyon Dam Release Temperatures



- 2007 release temperatures lower than 2006 due to slightly higher minimum reservoir elevation and reduced runoff

Colorado R above Little Colorado R

